

# **NOTIFICATION OF ADDENDUM**

## **ADDENDUM NO. 1**

**DATED 6/23/2010**

<b>Control</b>	<b>0047-06-144, ETC.</b>
<b>Project</b>	<b>C 47-6-144, ETC.</b>
<b>Highway</b>	<b>US 75</b>
<b>County</b>	<b>COLLIN</b>

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an addendum notification which details the changes and the respective proposal pages which were added and/or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: C 47-6-144

CONTROL: 0047-06-144

COUNTY: COLLIN

LETTING: 07/08/2010

REFERENCE NO: 0622

**PROPOSAL ADDENDUMS**

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\_ PROPOSAL COVER

\_ BID INSERTS (SH. NO.:

X GENERAL NOTES (SH. NO.: I and J

\_ SPEC LIST (SH. NO.:

\_ SPECIAL PROVISIONS:

ADDED:

DELETED:

\_ SPECIAL SPECIFICATIONS:

ADDED:

DELETED:

X OTHER: Plan Sheets

DESCRIPTION OF ABOVE CHANGES

(INCLUDING PLANS SHEET CHANGES)

GENERAL NOTES: SHEET I AND J: REVISED NOTES ON ITEM 8551

PLAN SHEETS: REPLACED PLAN SHEET 3D TO REFLECT THE ABOVE CHANGES

**County:** Collin

**Highway:** US 75

**GENERAL NOTES: Intelligent Transportation System (ITS)**

**GENERAL:**

The construction, operation and maintenance of this proposed project will be consistent with the State Implementation Plan as prepared by the Texas Commission of Environmental Quality.

This Project will be a Standard Workweek in accordance with Item 8: Prosecution and Progress, Article 8.3.A.4 of the 2004 Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges.

Verify the location of all existing underground installations and provide adequate protection for them.

Underground utilities owned by the Texas Department of Transportation (TXDOT) may be present within the Right Of Way on this project. Contact 1-800-DIG-TESS at 1-800-344-8377 for exact locations prior to drilling for foundations or any work that might interfere with or damage present facilities. Contact the Traffic Signal Shop at 214-320-6682, for state maintained utility locations. Contact the appropriate office a minimum of 72 hours (3 business days) in advance of excavation for location of TXDOT utilities. For irrigation systems, call TxDOT Maintenance Landscape Office (214-320-6205) for locates, a minimum of 72 hours (3 business days) in advance of excavation. If city or town owned irrigation facilities are present, call the appropriate department of the local city or town a minimum of 72 hours (3 business days) in advance of excavation.

The Contractor is responsible for adjustments in “ITS” construction, which may be needed because of conflicts with underground utilities. Consult the appropriate utility company prior to making any adjustment proposals. Obtain the Engineer’s approval for any adjustments required due to utility conflicts. The Contractor is responsible for any damage incurred during this adjustment process.

Perform all electrical work in accordance with the National Electrical Code, TXDOT Standard Sheets, and the Local Electric Company.

Coordinate electrical service installation with TXU Electric representatives according to their respective area.

The Contractor is required to provide to the Department a physical address, also known as a “911 location” for each electrical service support. The Contractor is responsible for electrical installation at the “ITS” locations, as indicated in the plans. These charges will not be paid for directly, but will be considered subsidiary to Item 628: Electrical Services. The Department will be responsible for energy consumed by the “ITS” locations.

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Coordinate ISDN telephone service installation with AT&T representatives according to their respective area.

The Contractor is required to provide to the Department a physical address, also known as a “911 location” for each telephone installation. The Contractor is responsible for ISDN telephone installation for ISDN lines at the Compressed Video Camera location. These charges will not be paid for directly, but will be considered subsidiary to the Item 6015: ISDN Compressed Video Equipment (Field), Item 6015: ISDN Compressed Video Equipment (Central). The Department will be responsible for monthly telephone charges occurred by the “ITS” locations.

The Contractor is required to provide to the Department a physical address, also known as a “911 location” for each telephone installation. The Contractor is responsible for POTS telephone installation for POTS lines, at the LED Dynamic Message Sign location. These charges will not be paid for directly, but will be considered subsidiary to the Item 8551: Installation of Dynamic Message Sign System. The Department will be responsible for monthly telephone charges occurred by the “ITS” locations.

Unless otherwise shown on the plans or as directed, the location of “ITS” conductors, cables, conduits, ground boxes, etc. are diagrammatic only. Upon approval, change locations to accommodate field conditions or phased construction.

When holes are required to be drilled through concrete structures at headwalls, etc., a coring device will be used. Masonry or concrete drills will be prohibited.

Provide as-built cable interconnection diagrams and communication network schematics at least 30 days prior to the start of data communications testing.

Meet weekly with the Engineer to notify him or her of planned work for the upcoming week.

Submit pre-letting questions by e-mail or fax as follows:

e-mail: [rcortez@dot.state.tx.us](mailto:rcortez@dot.state.tx.us)

fax: (214) 320-6294

The answers will be submitted in the same format in which they are received. A file containing these questions and answers will be available for review at the area Engineer’s office located at 4777 E, Highway 80 Mesquite, Texas 75150-6643.

All materials and services not expressly called for in the specification or not shown in the plans, which may be necessary for complete and proper construction of the “ITS” Network, will be preformed, furnished and installed at no cost to the Department.

The Asynchronous Transfer Mode (ATM) Switch installation or configuration will be conducted by a qualified person who is either a representative of the ATM Switch manufacturer, or certified in installing or configuring the ATM Switch, by the ATM Switch manufacturer.

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#### **ITEM 400: STRUCTURAL EXCAVATION**

All excavations and disposal of surplus materials required for structures will be included in the unit price bid for the various items for which excavation is required.

#### **ITEM 416: DRILLED SHAFT FOUNDATIONS**

Payment for furnishing and installing anchor bolts mounted in drill shafts will be included in the unit price bid for the various diameter drill shafts.

Drill shaft foundations will extend a minimum of five feet into rock, at locations where rock is encountered, at a depth less than the drilled shaft lengths as shown on the plans or as directed.

Probe the drill site before drilling sign foundations, to determine the locations of utilities and structures. The Contractor will be paid for only once, regardless of the extra work caused by the occurrence of these obstructions.

Form, or provide a smooth finish to, portions of drilled shaft that project above the ground line. Place a  $\frac{3}{4}$  inch chamfer on the top edge of each camera pole foundation. This work will not be paid for directly, but will be considered subsidiary to this bid item.

All drilled shaft foundations will be based on the lengths shown on the plans or those established in writing. Adequate calculations for measurements of foundations have been made in accordance with Item 9: Measurement and Payment, Article 9.1 of the Standard Specifications. Increases or decreases in the quantities required by change in design will be measured as specified and the revised quantities will be the basis for payment.

#### **ITEM 502: BARRICADES, SIGNS AND TRAFFIC HANDLING**

Provide, install, maintain, and remove upon completion of work, a complete set of barricades, and other traffic control devices, used for traffic handling, as indicated on the plans and as directed.

No lane or ramp closure will be permitted during the peak hours of 6:00 A.M. to 9:00 A.M. and 3:30 P.M. to 7:00 P.M., on Mondays through Fridays.

Provide a written notification of any main lane or frontage road temporary lane closure to the Engineer, for approval and dissemination to the public, before 1:00 P.M., on the working day prior to the date of the anticipated temporary lane closure. Type and submit notifications that contain the following specific information: date of closure, roadway and direction for closed lane, the operations of work within the closure, and the names of cross-streets between which the closure takes place. Temporary lane closures not appearing on the list will not be permitted.

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For pedestrian safety, provide plastic construction fencing, a minimum of 4 feet high, around open excavations.

Place barricades and warning signs at stockpiles to adequately warn motorists. Erect a "Type III Barricade" immediately in front of, or at each end, at all stockpile sites that are less than 30 feet from the edge of any traveled lane. Place one object marker (OM-2HP) per 100 feet, alongside the stockpile, when a stockpile site equals or exceeds 100 feet in length.

Construct portions of this project, during any phase, those portions which are not affected by or in conflict with the proposed method of handling traffic or utility adjustments.

Furnish, place and maintain vertical panels along the edge of pavements and fills in accordance with the "Texas Manual on Uniform Traffic Control Devices." The vertical panels will be supplemented with lights, as directed.

Place barricades and signs in such a manner as to not to interfere with the sight distance of drivers entering the highway from driveways or side streets. To facilitate shifting, barricades and signs used in lane closures or traffic staging may be erected and mounted on portable supports. The design of these supports is subject to the approval of the Engineer.

The Contractor will not be permitted to commence work on the road before sunrise. Arrange work so that no machinery or equipment will be closer than 30 feet to the traveled roadway after sunset, except as indicated in the plans, or as directed.

When moving equipment, not licensed for operation on public highway, on or across any pavement, protect the pavement from all damage using an approved method.

Use rubber-tired equipment for moving dirt or other materials along or across paved surfaces.

#### **ITEM 506: TEMPORARY EROSION, SEDIMENTATION AND ENVIRONMENTAL CONTROLS**

The Storm Water Pollution Prevention Plan (SW3P) for this project will consist of using the following items:

Temporary Sediment Control Fence

Biodegradable Erosion Control Logs

This work will be paid for under their respective bid items.

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**ITEM 613: HIGH MAST ILLUMINATION POLES**

Ground sleeves are required on all high-mast poles.

**ITEM 618: CONDUIT**

“ITS” Conduit will be installed a minimum of 42 inches deep, when trenching methods are used, unless shown differently on the plans.

Conduit will be installed a minimum of 60 inches deep when bored under existing pavement. Conduit will be placed under existing pavement by approved boring method, or as directed. Pits for boring will not be closer than two feet from the edge of the pavement, or as directed. Water Jetting will not be permitted.

Place by the open trench methods all proposed “ITS” conduits, below the proposed subgrade, unless otherwise shown on the plans. The Contractor can choose other methods, such as boring, if he fails to place the conduit as shown on the plans, or as directed, at no additional cost to the Department.

Install “ITS” conduits in stages to accommodate phased construction. Cap the ends of conduits to prevent obstructions.

Place in all installed conduits, a permanent non-metallic pull cord, with a minimum tensile strength of 600 pounds.

Mark all “ITS” conduit runs by means of a white delineator marker accompanied by a 3 1/2 inch diameter benchmark, at 1/3 points between ground boxes, and at locations where the conduit makes directional changes, or as directed. Each benchmark will have “TEXAS DEPARTMENT OF TRANSPORTATION” and “FIBER OPTIC CABLE” imprinted in the cap. The benchmark will have the capability of being embedded a minimum of 18 inches in the ground. The type of delineator and benchmark will be approved. This work will not be paid for directly, but will be considered subsidiary to Item 618: Conduit.

Supply “Underground Utility” warning stickers as approved by the engineer. One sticker will be placed on each side of the delineator. The cost of the warning stickers and any work required will not be paid for directly, but will be considered subsidiary to Item 618: Conduit.

Install, for each “ITS” conduit run, a metallic underground warning tape, as detailed in the plans. This warning tape will be imprinted with “CAUTION BURIED FIBER OPTIC CABLE.” This will not be paid for directly, but will be considered subsidiary to Item 618: Conduit. The warning tape does not need to be installed when conduit is bored under a roadway section or landscaped area. At locations where the Contractor chooses to bore conduit underground, in areas where

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trenching methods can be used, the Contractor will install the metallic underground warning tape.

The Contractor is responsible for the locating of any utilities that may interfere with the installation of conduit. The Contractor is responsible for any damage done to any existing underground conduit or utilities. Replace any damage done to existing underground conduit or utilities. Replacing damage to existing underground conduit or utilities will be done at the expense of the Contractor and to the satisfaction of the Engineer.

The location of conduits and ground boxes is diagrammatic only, upon approval, shift locations to accommodate field conditions.

When trenching through rocky soil, place nonmetallic conduit on a two-inch sand cushion and backfill with a minimum of six inches of sand.

Conduit will be placed under existing pavement by approved boring method, unless otherwise directed by the Engineer. Pits for boring will not be closer than two feet from the edge of the pavement, unless otherwise directed. Water Jetting will not be permitted.

The Contractor will secure permission from the proper authority and the approval of the engineer before cutting into or removing any walkways or curbs, which might be required in making the installation.

After the work is completed, the Contractor will restore any curbs or walkways, which have been removed, to the equivalent of their original condition and to the satisfaction of the engineer.

Where a trench is cut through the surfaced parking shoulder, median or driveways for laying conduit, the base and surfacing will be replaced with similar materials equal in appearance and quality to the original construction.

When boring is used for under pavement conduit installations, the maximum allowable over cut will be one inch in diameter.

If the Contractor chooses to combine multiple conduits into one bore, the Contractor will install a casing around the conduits in order to meet the requirements of the one inch in diameter allowable over cut. This work will not be paid for directly, but will be considered subsidiary to Item 618: Conduit. At no time will conduits that contain power and non-fiber optic communications be allowed to be combined into one bore.

When conduits are bored, the vertical and horizontal tolerances will not exceed 18 inches as measured from the intended target point.



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The use of a pneumatically driven device for punching holes beneath the pavement (commonly know as a “Missile”) will not be permitted on this project.

Secure PVC conduit permanently using solvent cement joint compounds, commonly known as solvent welding. Perform cementing of the joints in accordance with standard construction practices, as well as the manufacturer’s recommendations for their particular product. Ensure that the resulting joints have sufficient strength and tightness to withstand the procedures required for concrete encasement, as shown on the plans, or as directed. Ensure that the resulting joints are secured without breakage, leakage, or permanent deformation.

The minimum bending radius for all conduits supplied on this project will be 18 inches, or as approved.

Use a cleaner-primer on all PVC to PVC joints before application of PVC cement.

Ensure that a minimum separation of at least 12 inches, for all conduits which have parallel runs that contain separate non-fiber optic communication and power.

For conduits installed for future use, install non-metallic pull cords, and plug conduits, using a mechanical conduit plug. Ensure that the mechanical plug creates a water and airtight seal. Ensure that pull cords have a minimum tensile strength of 600 pounds. This work will not be paid for directly but will be subsidiary to this item.

Use a pre-manufactured duct spacing system, such as Calton “Snap-Loc” spacers, Underground Devices “Wunpiece”, or an approved equal, as a preferred method to secure and support conduit prior to encasement, as required in Item 618: Conduit, Article 618.3.

## **ITEM 620: ELECTRICAL CONDUCTORS**

Extra cable length will be included in each run, to provide adequate slack, at each ground box, camera pole, communications hub, dynamic message sign, or microwave vehicle detector, as determined.

All power conductors and communication cables will be color-coded consistently, or permanently labeled, between all connections and splices, to ensure immediate identification. The Contractor will submit a chart or list identifying all cables and conductors, in a logical and sequential manner prior to installation, for the Engineer’s approval.

All conductors will be continuous, without splices, from terminal point to terminal point, or as otherwise directed.

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At the Contractor's option, electrical grounding connections and permissible splices may be made by the thermal fusion process, Cadweld, Thermaweld or equal, in lieu of bolted connections or splices.

Insulated parts and wire insulation will be insulated to withstand a minimum of 600 volts.

Lubricate cables or conductors, with a lubricant generally used for this purpose, when pulling cables or conductors through conduit.

The Contractor will test each wire of each cable or conductor before and after installation. Any incomplete circuit or any damage to any wire or any cable will result in the immediate rejection of the entire cable being tested. The Contractor will remove and replace the rejected cable at his own expense.

All circuits will test clear of faults, grounds and open circuits.

All ungrounded conductors will be continuous, without splices, from terminal point to terminal point. Equipment grounding conductor shall be bonded together in all ground boxes, as per National Electrical Code. All #6 bare tracer wires will be bonded as per National Electrical Code, Article 250-96(A).

Electrical certification for this project will be as per Item 7 of the current Texas Standard Specifications and any special provisions to Item 7.

#### **ITEM 624: GROUND BOXES**

All "ITS" ground boxes will be constructed with aprons.

Submittal literature will be provided to the Engineer prior to installation.

#### **ITEM 628: ELECTRICAL SERVICES**

Coordinate with the appropriate utility company during the first three weeks of the project lead-time period allowing adequate time for any necessary utility adjustments, transformer installation, etc. This work will not be paid for directly, but will be considered subsidiary to Item 628: Electrical Services.

Silk screening or other acceptable methods are to be used to label the service enclosures indicating that the power provided is for the "ITS" System. Labeling service enclosures will be considered subsidiary to the bid Item 628: Electrical Services and will not be paid for directly.

Concrete for service pole foundations, when required, will be Class A and will be in accordance with Item 421: Hydraulic Cement Concrete, except that concrete will not be paid for directly but

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is to be considered subsidiary to Item 628: Electrical Services. Reinforcing steel for service pole foundations, when required, will be in accordance with Item 440: Reinforcing Steel, except that reinforcing steel will not be paid for directly but is to be considered subsidiary to Item 628: Electrical Services.

#### **ITEM 6009: SYSTEM SUPPORT EQUIPMENT**

The following equipment will be provided to the Department to be used as operational support equipment. This equipment will be the same make and model as the equipment installed in the field. These items will be paid for with the lump sum unit bid price for system support equipment.

(1) – CCTV Field Equipment (complete set to include cameras, pressured camera housing, zoom lens, pan/tilt unit and camera control receiver)

(1) – 5GHz Ethernet Radio

(1) - Terminal Server

#### **ITEM 8516: 5 GHZ ETHERNET RADIO**

Radio frequencies shall exclude the following: 5140.10 MHz, 5250.00 MHz, 5608.00 MHz, and 5640.00 MHz, due to electromagnetic interference with air navigation facilities, in accordance with the Federal Aviation Administration.

#### **ITEM 8551: INSTALLATION OF DYNAMIC MESSAGE SIGN SYSTEM**

Two flashing beacons will be installed and made operational on each DMS installed on this project. The beacons will be 12 inches in size and will utilize light emitting diode (LED) technology. The beacons will be configured to flash simultaneously.

The LED dynamic message signs installed on this project will be configured to operate using existing master controllers located at DalTrans. Prior to contract completion, the Contractor will demonstrate complete operability of all dynamic message signs installed on this project from DalTrans.

The Contractor will make sure that during construction, the attachment of DMS with sign verticals to the truss structure will not interfere with structure bolt heads.

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Provide communication cables between the DMS and the DMS controller cabinet for the operation of the sign.